



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,961	08/31/2001	Seung-Cheol Hong	P54428RE	7701

7590 04/02/2003

Robert E Bushnell and Law Firm  
1522 K Street NW  
Suite 300  
Washington, DC 20005-1202

EXAMINER

DHARIA, RUPAL

ART UNIT

PAPER NUMBER

2189

DATE MAILED: 04/02/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/942,961	HONG ET AL.	
Examiner	Art Unit	2189	
Rupal D. Dharia			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 19 February 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-60 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 1-10 and 49-54 is/are allowed.

6) Claim(s) 11-33,35,36,38,42,43,46,55,56 and 60 is/are rejected.

7) Claim(s) 34,37,39-41,44,45,47,48 and 57-59 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-33, 35-36, 38, 42-43, 46, 55-56, and 60, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Heineman (5,465,366).

3. As per claims 11, 17, 21, 25, 31, 35, 38, and 55, AAPA teaches a power saving display device and method for controlling power thereof including a power supply providing power to a heater of a tube in a monitor (Fig. 1; col. 1, lines 37-67; col. 4, lines 10-60). However, AAPA does not teach a switching circuit being disposed between the main power supply and the heater for switching off the power to the heater when the monitor enters the power-off mode.

Heineman teaches that it is known to provide a switching circuit between a power supply input and output to a monitor for controlling power to the monitor in response to a control signal (Abstract; Fig. 2; col. 2, lines 30-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the switching circuit as taught by Heineman in the system of AAPA because it would provide a control for saving power and preventing burn-in from constant display of the same image and also prolong the monitor life.

4. As per claims 12, 18, 22, 26, 32, 43, 46, and 56, AAPA and Heineman discloses the claimed invention as described above and furthermore AAPA teaches a control unit receiving a video synchronization signal and generating a control signal to control the switch (Fig. 1; col. 1, lines 23-35; col. 4, lines 30-43).

5. As per claims 13, 15, 19, 23, 27, 29, 33, and 36, AAPA and Heineman discloses the claimed invention as described and AAPA teaches that it is well known and expected in the art to include a mode indicator including LEDs for indicating a power mode (Fig. 1; col. 2, lines 4-14; col. 4, lines 47-60).

6. As per claims 14, 20, 24, and 28, AAPA and Heineman discloses the claimed invention as described above and furthermore AAPA teaches the present power mode being one selected from among a plurality of power modes in accordance with DPMS standards (col. 4, lines 10-45).

7. As per claims 16, 30, 42, and 60, AAPA and Heineman disclose the claimed invention as described above. Official notice is taken in that both the concepts and advantages of using transistors for switching is well known and expected in the art of switching. It would have been obvious to one ordinary skill in the art at the time the invention was made to include the transistor as the switching circuit to provide a reliable component for switching and to adhere to common practice in the technology as the transistor is a fundamental component in all modern electronics.

***Response to Arguments***

8. Applicant's arguments filed 2/29/2003 are not persuasive.

a. As per applicant's arguments regarding the cited sections of Figure 1, col. 1, lines 37-67, and col. 4, lines 10-60 are not "Applicant's Admitted Prior Art (AAPA)", it is noted that in the cited sections of col. 4, line 10, it is stated "An earlier power management control apparatus is shown in Fig. 1 ...". As per Webster's II New College Dictionary, earlier is defined as near the beginning of a given series, time period or course of events. Furthermore, MPEP Section 2129 states "when applicant states that something is prior art, it is taken as being available as prior art against the claims. Admitted prior art can be used in obviousness rejections." Finally, column 4, line 61 states that "However, the above arrangement has the shortcomings of ....", thus further supporting that Figure 1 and associated columns are prior art. Therefore, since Hong et al. has clearly defined Figure 1 and associated columns in the specification as "earlier", it is available as prior art.

***Allowable Subject Matter***

9. Claims 1-10 and 49-54, are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter:

Prior art does not teach all of the limitations of the independent claims in combination with other elements. Specifically, prior art does not teach power management for a display monitor that contains a switching circuit provided in a heater power supply line between the output of a transformer and a heater of a color display tube of the monitor for switching off the heater power supply line when the monitor enters a power-off mode based upon receiving or not receiving video synchronization signals from a video signal from video port and further prior art does not

teach a mode indicator connected to indicate the power-mode of the monitor based upon a mode indicating signal in combination with the above.

11. Claims 34, 37, 39-41, 44-45, 47-48, and 57-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rupal D. Dharia whose telephone number is (703) 305-4003. The examiner can normally be reached on M-F 7:00 AM- 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3600.



Rupal D. Dharia  
Primary Examiner  
Art Unit 2189

Rdd  
April 1, 2003